

## ABSTRACT

Corresponding to the compared results of threshold values of uniformly random numbers supplied from a uniformly random number generator and pixel values of an original picture signal, each pixel value of the original picture signal is encoded. The resultant encoded picture signal is transmitted. When a decoding apparatus receives transmission data, the decoding apparatus cumulates encoded values of the transmission data for each pixel value, counts the number of cumulation times, and decodes the cumulated encoded values for each pixel value of the original picture signal corresponding to the number of cumulation times.